## ABSTRACT

Provided a method for treating hardly-decomposablesubstance-containing water, in which hardly decomposable 5 substances such as dioxins, contained in contaminated water (treatment raw water) are concentrated and rendered harmless by providing the steps of (B) adding an adsorbent to water containing a hardly decomposable substance (treatment raw water) to cause the hardly decomposable 10 substance to be adsorbed on the adsorbent (adsorption treatment step), (C) separating a permeated liquid through a filter membrane to concentrate the adsorbent adsorbing the hardly decomposable substance (membrane filtering treatment step), and (D) chemically decomposing the hardly 15 decomposable substance adsorbed on the concentrated adsorbent with a peroxide without any operation of desorption from the adsorbent (chemical decomposition step), and the method can be applied to water containing a reducing substance such as bisulfate that neutralize free 20 chlorine and can render the hardly decomposable substances harmless efficiently at a low cost without being limited by properties of the hardly decomposable substances contained.